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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/127,483	07/31/1998	CHRISTOPHER L. BOYD	RIC-97-118	1242

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WORLD.COM, INC.
TECHNOLOGY LAW DEPARTMENT
1133 19TH STREET NW
WASHINGTON, DC 20036

EXAMINER

TSEGAYE, SABA

ART UNIT PAPER NUMBER

2662

DATE MAILED: 07/30/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/127,483

Applicant(s)

BOYD ET AL.

Examiner

Saba Tsegaye

Art Unit

2662

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 March 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

1. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Von Hammerstein et al. in view of White et al.

Regarding claims 1, 5, 6, 8, 11, 15, 16 and 18, Von Hammerstein discloses an apparatus and method for communicating link status information across a frame relay network. Fig. 2 shows FRAGs 22a-22c and FRADs 14a-14c (claimed storing, in plural attachment devices, information respecting voice terminals) and Frame Relay Network 12. Further, Von Hammerstein describes that the local and remote FRADs join the segmented PVCs by translating between their respective addressing fields. The remote FRAD periodically issues link status messages to the local FRAD to apprise the local FRAD of the status of each of the sub-multiplexed PVCs (claimed generating a request from a particular attachment device to another attachment device for information respecting voice terminals).

Regarding claims 2 and 12, Von Hammerstein discloses means in plural attachment devices for generating a query to one or more virtual circuits, to determine if the circuit accesses another attachment (column 6, lines 34-51 and column 9, lines 38-55).

Regarding claims 3 and 13, Von Hammerstein discloses a method wherein the particular attachment device, transmits accessibility information, respecting voice terminals accessible through the voice switch associated with the particular attachment device, to the another attachment device (column 13, lines 45-65).

Regarding claims 4, 7, 14 and 17, Von Hammerstein discloses a method wherein the another attachment device responds to the request by the particular attachment device by

Art Unit: 2662

transmitting the accessibility information respecting voice terminals reachable via the associated voice switch (column 9, lines 38-55).

Regarding claims 9 and 19, Von Hammerstein discloses a method wherein the voice switch is a PBX and is also coupled to the PSTN (column 15, lines 29-40).

Regarding claims 10 and 20, Von Hammerstein discloses a method wherein the information respecting voice terminals accessible through the associated voice switch identifies terminal which are directly accessible to the associated voice switch or terminal which are accessible through the associated voice switch through a packet switched network (column 9, lines 49-55)

However, Von Hammerstein does not disclose storing at the particular attachment device information received in response to the request from the particular attachment device.

White discloses a system and method for providing telephone type services over the internetwork. Fig. 4 shows gateway routers 104, 116 and Internet address database 112. The gateway router 104 queries the Internet address database 112 for the Internet address of the destination gateway router 116.

It would have been obvious to one ordinary skill in the art at the time the invention was made to add storage for storing at the particular attachment device information received in response to the request from the particular attachment device, such as that suggested by White, in the FRAD of Von Hammerstein in order to reduce data processing delay in the frame relay network.

Art Unit: 2662

2. Claims 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Von Hammerstein et al. in view of Koepper et al. (US 5,805,690).

Von Hammerstein discloses an apparatus and method for communicating link status information across a frame relay network. Fig. 2 shows FRAGs 22a-22c, FRADs 14a-14c, voice terminals and Frame Relay Network 12 (claimed a plurality of voice switch PBX coupled via respective frame relay attachment devices' to frame relay network and a first plurality of voice terminal coupled to the plurality of PBX). Further, Von Hammerstein describes that the local and remote FRADs join the segmented PVCs by translating between their respective addressing fields. The remote FRAD periodically issues link status messages to the local FRAD to apprise the local FRAD of the status of each of the sub-multiplexed PVCs.

Regarding claims 22 and 23, Von Hammerstein discloses a method wherein a plurality of PSTNs coupled to the plurality of PBXs (column 15, lines 29-40).

However, Von Hammerstein does not expressly describe the following:

- a) each FRAD is configured to store an identification of all first voice terminals accessible to the respective PBX of the FRAD; and
- b) each FRAD is configured to store an identification of all first voice terminals accessible to the other PBXs of the other FRAD.

Koepper discloses, in Fig. 4, a Distributed Transit PBX 30 comprises a plurality of N interconnected Nodes 40-44, which permit a plurality of M PBXs 32-34, 36-39 that are connected to the Distributed Transit PBX 30 to communicate over a wide area network. the

Art Unit: 2662

Nodes 40, 42, and 44 each comprise at least one DSM 50, 51, 54, or 56 which are used to provide distributed call control between nodes 40, 42 and 44 across the Distributed Transit PBX 30. The DSMs are located in predetermined ones of the Nodes with each DSM coupled to at least one associated PBX. Further, Koepper discloses the following method steps:

- a) a listing of all Exchange Codes (ECs) handled by a local routing table of a memory in the DSM;
- b) a listing of all ECs handled by all of the other DSMs of the Distributed Transit PBX and their associated PBXs is stored in a remote routing table of the memory in each of the DSMs;
- c) upon receiving a call request and an EC for a called PBX at a DSM from an associated calling PBX, determining at the DSM if the EC is found on the local routing table, and routing call back to the associated called PBX when the EC is found on the local routing table;
- d) determining if the received EC is found on the remote routing table for a remote DSM when the EC is not found on the local routing table, when the EC is found in the remote routing table, the call is routed to a remote DSM which routes the call to the called PBX.

It would have been obvious to one ordinary skill in the art at the time the invention was made to add storage to store an identification of all first voice terminals accessible to the respective PBX of the FRAD; and to store an identification of all first voice terminals accessible to the other PBXs of the other FRAD, such as that suggested by Koepper, in the in the FRAD of Von Hammerstein in order to provide a method of distributed call control which is performed at various FRAD across a Frame Relay Network.

Response to Arguments

3. Applicant's arguments filed 03/11/02 have been fully considered but they are not persuasive. Applicant argues (Remark, page 5) that the Von Hammerstein reference does not describe "information respecting voice terminals accessible through the associated voice switch" and " means in plural attachment devices for storing information respecting voice terminals accessible through the associated voice switch". the Examiner respectfully disagrees with the Applicant contention.

Regarding "voice terminals accessible through the associated voice switch", Von Hammerstein clearly describe that after each of the voice packets transmitted through the frame relay network, the voice packets can be distributed to telephony equipment connected to the remote device according to the multiplexing information (column 4, lines 26-42). Fig. 10 shows that FRAD 121, which comprises the queue logic 151, includes logic to convert the queued voice samples into analog voice signals before they are output to voice equipment PBX. This means that voice terminals are accessible through the associated voice switch.

With respect to " means in plural attachment devices for storing information respecting voice terminals accessible through the associated voice switch", Von Hammerstein describes that the remote FRAD periodically issues link status messages (e.g., active connection, new connection, connection deletion) to the local FRAD (column 7, lines 23-51).

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 2662


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Saba Tsegaye whose telephone number is (703) 308-4754. The examiner can normally be reached on Monday-Friday (7:30-5:00), First Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on (703) 305-4744. The fax phone numbers for the organization where this application or proceeding is assigned is (703) 872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-0377.

ST
July 25, 2002



HASSAN KIZOU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600